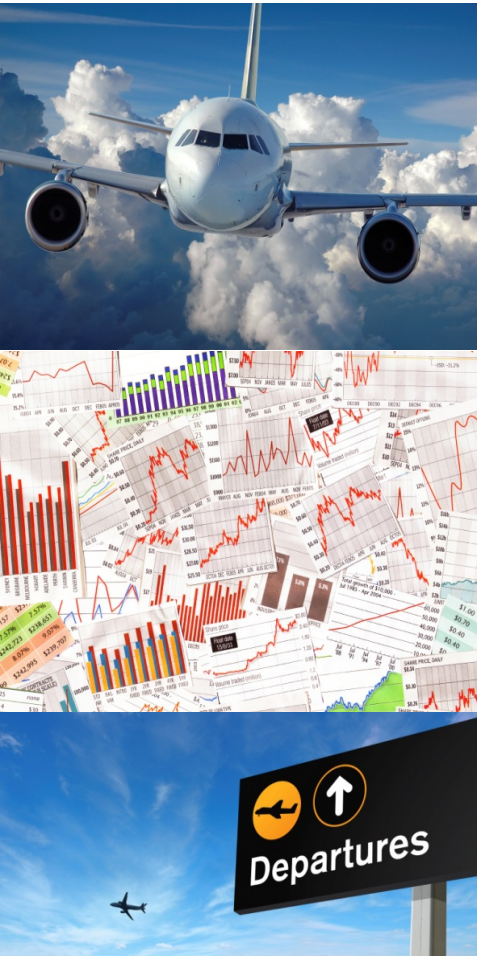


# **Aviation growth, air transport industry trends & hub development in India**

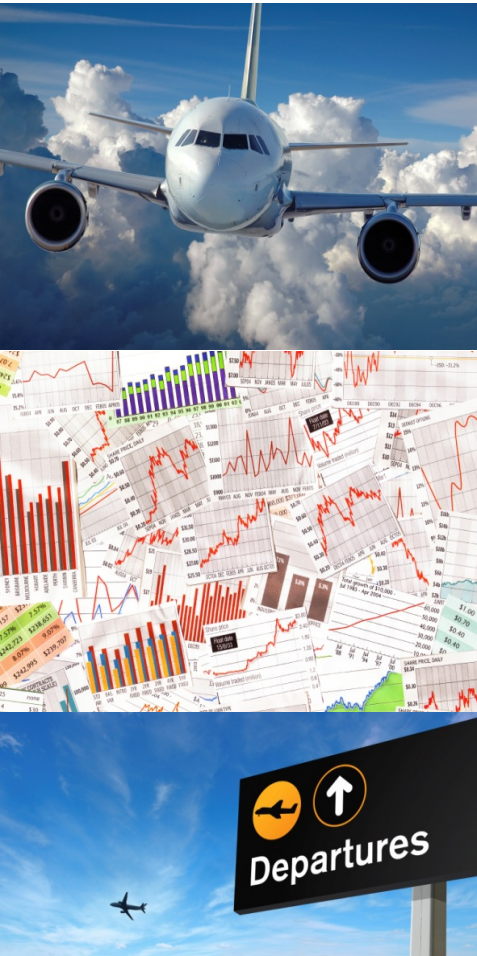
[www.capaindia.com](http://www.capaindia.com)

5 April 2011

Airneth – IFFAAD Seminar, New Delhi



- **Leadership:** CAPA India has emerged over the last 7 years as the leading aviation consulting, research and knowledge practice in South Asia.
- **Influence:** We help to shape the direction of the aviation industry through strategic analysis and advisory services and connect with the leaders of industry and government on a continual basis. We have completed more than 550 engagements around the world.
- **Applied Research:** Our research division has produced close to 8,000 reports for the global aviation community across all areas of the aviation value chain.
- **New initiatives include:**
  - CAPA AeroPark
  - CAPA Aircraft Advisory
  - CAPA Ventures
  - CAPA Aerospace City



- **Global Coverage:** Our research now spans all key international markets, including North America, Europe, China, Asia Pacific, Middle East and most recently Africa.
- **Sectoral Coverage:** Our exhaustive range of reports provides sectoral focus for airlines, low cost carriers, airports, regulators and investors.
- **Data:** We have access to live feeds across multiple data points including global aircraft fleets, schedules, capacity and fares to which we are able to apply in-depth analysis.
- **India Research:** We maintain a dedicated India-based research desk, conducting quantitative and qualitative studies across the aviation value chain.

**Recent India Reports include:**

- Addressing the Skills Crisis;
- Business & General Aviation;
- Role of Technology;
- Corporatisation of ATM;
- Outlook for Indian Aviation in 2011;
- Ground Handling Policy;
- Economic Regulation of Airports.

**Upcoming India Reports include:**

- Aerospace & Manufacturing;
- Airline Distribution Trends;
- Airport & Travel Retail Outlook;
- Ancillary Revenue Generation;
- Cargo & Logistics;
- Maintenance, Repair & Overhaul.



EXPORT-IMPORT BANK  
of the UNITED STATES



## CAPA AeroPark

- World class aviation university and training campus providing academies for pilots, engineers, cabin crew, air traffic controllers, regulators and management.
- Will include courses dedicated to the business and general aviation sector.
- Flagship campus in Bangalore with satellite academies in New Delhi and Mumbai.
- **Launching September 2011**



Review

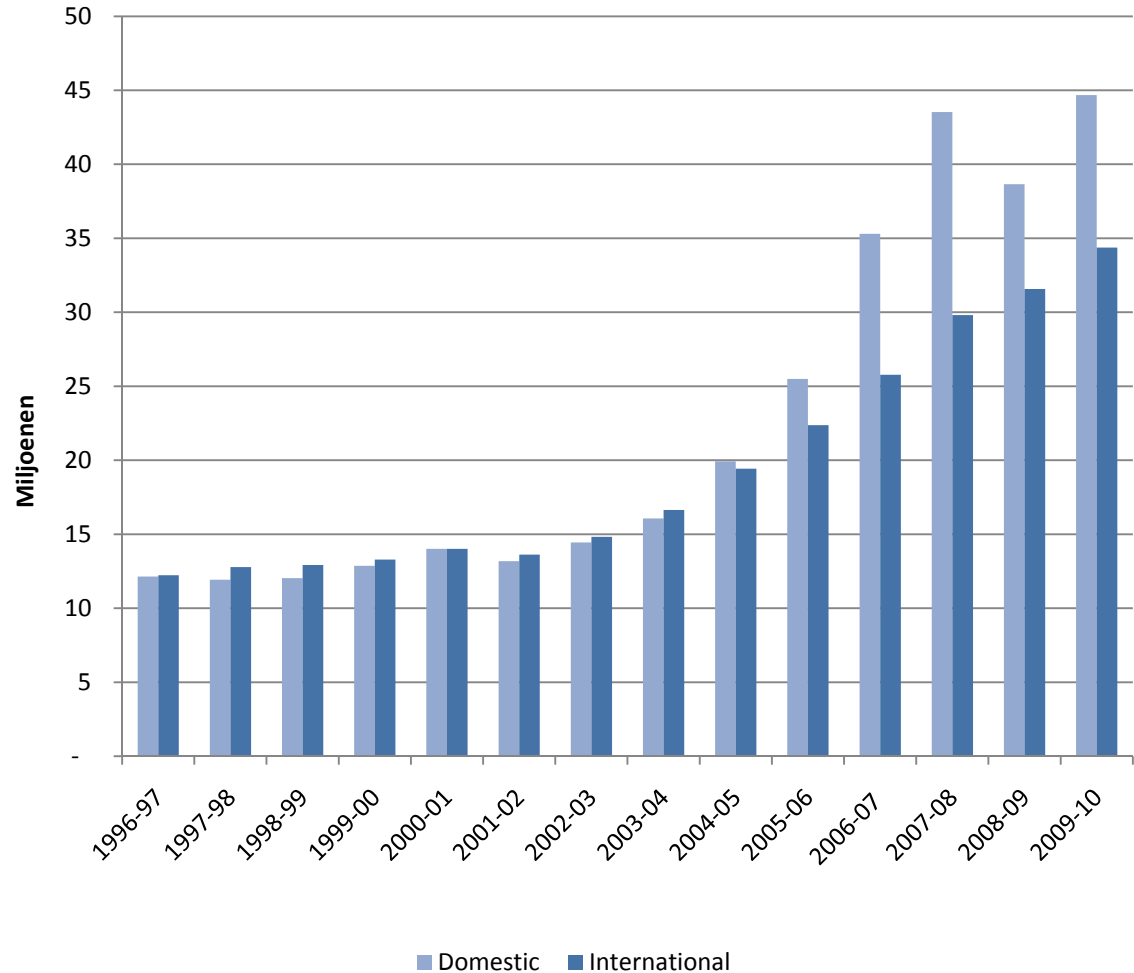
**2003/04-2008: Dramatic Change**

In 2003/04 commenced the most fascinating and game changing period in the history of Indian aviation. Genuine and dramatic developments occurred:

- Domestic open skies policy was established – LCCs were encouraged;
- Liberal bilateral stance adopted, supporting India's trade and tourism ambitions;
- International cargo open skies policy was introduced;
- National carrier fleet orders were approved and AI/IC merger concluded;
- Private carriers were gradually allowed to fly overseas;
- Metro airport upgrade and modernisation program launched – a key highlight;
- 35 non-metro airports were identified for modernisation;
- Greenfield and merchant airport policy introduced;
- Foreign direct investment caps liberalised in MRO, cargo airlines, training etc.
- Previous regime introduced fiscal reform in IATT, customs duty.

- Rapid Growth:** After years of stagnation, both domestic and international traffic surged during between 2004 and 2008.
- Excess Capacity:** However, this growth was in part the result of capacity growing at twice the pace of underlying demand.
- Supply Side:** Growth highlighted constraints in manpower and airport infrastructure.
- Consolidation:** Airline consolidation was welcome but in large part poorly executed

Indian Domestic & International Passenger Traffic



Source: Airports Authority of India, CAPA.

Review

**2003/04-2008: Dramatic Change**

**Result**

- Perhaps the fastest metamorphosis of a national aviation industry in history;
- Generational shift in attitudes towards the role of aviation in the economy;
- LCC model truly established itself in India;
- Some of the nation's full service airlines rank amongst the best in the world.
- Airport upgrades will serve India well for decades to come.
- This period paved the way for the US\$120bn investment expected by 2020.

**Areas that required greater attention:**

- Strengthening of the regulatory regime – technical as well as economic;
- Development of skills through education and training.



Review

**2008-2009/10**

- External environment turned sharply negative:
  - Oil prices reached US\$147/gallon
  - Global recession and slowdown in Indian GDP growth;
  - Collapse of international financial markets;
  - Terrorist attacks impacted inbound tourism.
- Cost pressures due to fuel in particular became a huge burden;
- Full service carriers experienced capital constraints – resulted in change in strategic direction for some;
- Airports experienced financing difficulties due to market conditions
  - Resulted in unanticipated development fees, increasing fares;
- LCC model however bloomed during the recession, highlighting its strength;
  - IndiGo reported strong profit in 2009/10
  - Jet / Kingfisher converted most domestic capacity to low cost ops;

Review

**Q3 2009 to Present**

- Growth has resumed, domestic traffic up almost in 2010/11;
- Private airlines were on track to post combined profit of US\$250m for FY10/11, but impacted by fuel price increases in March quarter;
- Opening of Delhi T3 a landmark development in Indian aviation;
- Focus on the upgrade of non-metro airports has resumed;
- DGCA preparing for long term restructuring – creation of new organisation;
- Decision to hive of ATC is an important decision.

## Outlook

### Profitability

- CAPA projects private carriers to post profit of US\$350-400 million in FY2012;
- Air India expected to report loss of US\$1-1.5 billion.

### Capacity

- Domestic capacity expect to increase 12-14%, could reach 16% if Air India launches low cost subsidiary on domestic routes.

### Traffic

- Domestic traffic projected to growth 17-18%, could go higher to 20%;
- International traffic to increase in the 10-12% range, likely at the higher end.

### Yields

- Domestic yields expected to strengthen 5-7%;
- CAPA believes market could absorb higher increases, airlines will hesitate

## Outlook

### Aircraft Orders

- IndiGo recently announced plans to acquire 180 narrowbodies;
- CAPA expects Indian carriers to order up to 200 new aircraft this year with list price of US\$11-12 billion.

### Capital

- Indian carriers expected to raise up to US\$1.5 billion equity from the markets;
- Air India will be seeking additional equity infusion from government;
- Two Indian LCCs planning to launch IPOs.

### Debt

- Indian carrier debt expected to reach close to US\$20 bn by end of this year;
- 50% aircraft related and 50% working capital/trade creditors;
- Big 3 airline groups are low on cash, need to reduce debt and increase liquidity;

## Outlook

### Challenges

- Direction of fuel prices is a major concern;
- Inflation at a macro-level may require tightening measures – could affect demand;
- Governance and corruption scandals have impacted investor sentiment;
- Congestion is re-emerging at the 4-5 largest airports;
- Navi Mumbai Airport tender is expected to be delayed until late this year;
- Shortage of skills is affecting ability to support expansion plans;
- Discovery of pilot licences issued against forged documents is a serious concern;
- Cabinet reshuffle involving Aviation Minister has slowed momentum;
- Administration of aviation in India requires transformational not ad hoc change.

- Today less than 2% of Indians fly domestically each year, and only 0.5% internationally.
- With a population only slightly larger than India, China's domestic air traffic is 5 times the size. Australia with a population of just 22 million, generates more domestic passengers than the whole of India.

	Population	Domestic Traffic	Trips per Capita	GDP per capita
<b>Australia</b>	21 million	50 million	2.38	\$38,100
<b>USA</b>	307 million	650 million	2.12	\$46,900
<b>Malaysia</b>	26 million	14 million	0.54	\$15,200
<b>Brazil</b>	199 million	~50 million	0.25	\$10,200
<b>China</b>	1,339 million	198 million	0.15	\$6,000
<b>India</b>	1,200 million	52 million	0.04	\$2,900

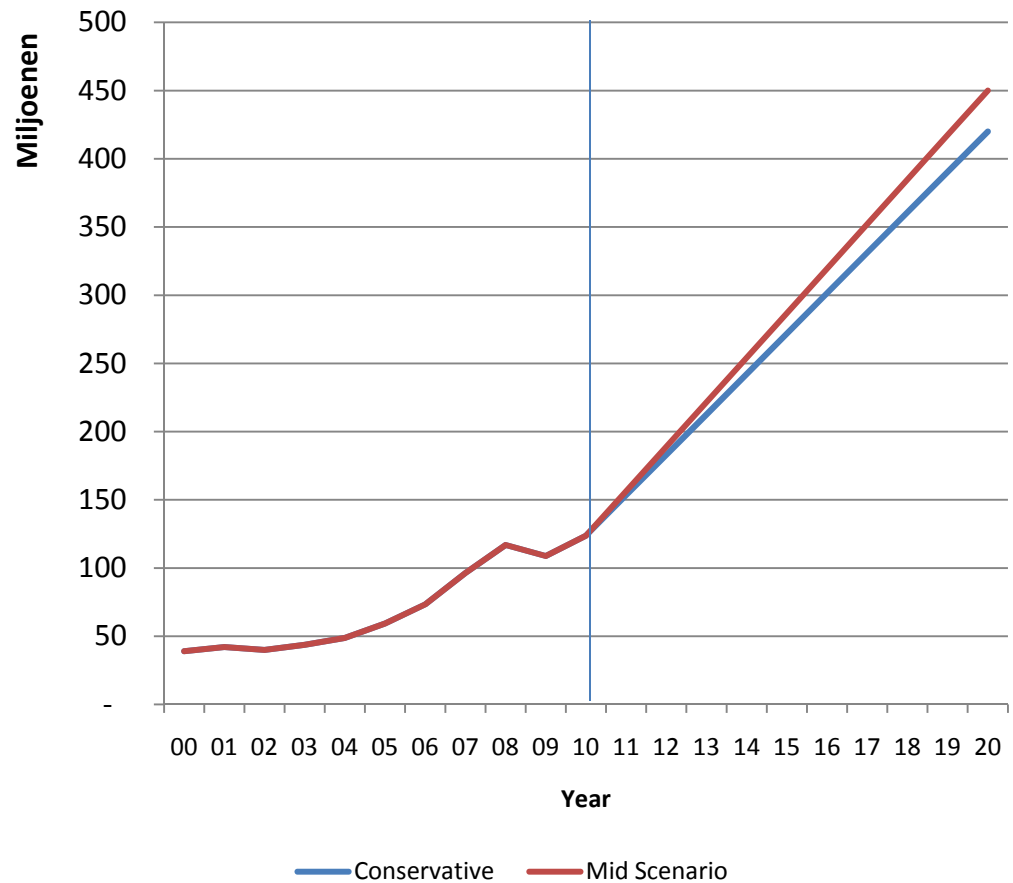
Source: CIA World Fact Book; FAA, DGCA India, CAAC, Malaysia Ministry of Transport, BTRE Australia, ANAC Brazil.

- Airports Council International projects that India will be the third largest aviation market in the world within 12-15 years.
- Airbus and Boeing project that the Domestic Indian market will be the fastest growing market in the world over the next 20 years.

2007			2012			2017			2027		
Rank	Country	Passengers (millions)	Rank	Country	Passengers (millions)	Rank	Country	Passengers (millions)	Rank	Country	Passengers (millions)
1	United States	1,450	1	United States	1,552	1	United States	1,790	1	United States	2,345
2	China	297	2	China	497	2	China	792	2	China	1,708
3	United Kingdom	243	3	United Kingdom	282	3	United Kingdom	324	3	India	581
4	Spain	210	4	Spain	251	4	Spain	294	4	United Kingdom	409
5	Japan	204	5	Japan	228	5	India	274	5	Brazil	407
6	Germany	186	6	Germany	218	6	Japan	259	6	Spain	370
7	France	140	7	India	176	7	Germany	252	7	Japan	330
8	Italy	129	8	France	168	8	Brazil	224	8	Germany	311
9	Brazil	120	9	Brazil	165	9	France	192	9	France	242
10	Canada	101	10	Italy	154	10	Italy	180	10	Italy	233
11	Australia	101	11	Australia	131	11	Australia	154	11	Australia	209
12	India	100	12	Canada	125	12	Canada	147	12	Mexico	206
13	Mexico	85	13	Mexico	109	13	Mexico	137	13	Canada	195
14	Turkey	67	14	Turkey	92	14	Russian Federation	112	14	Russian Federation	178
15	Korea, Republic of	65	15	Russian Federation	84	15	Turkey	112	15	Turkey	157
16	Thailand	57	16	Korea, Republic of	78	16	UAE	95	16	UAE	152
17	Indonesia	56	17	Indonesia	71	17	Korea, Republic of	92	17	Indonesia	148
18	Russian Federation	52	18	UAE	70	18	Indonesia	92	18	Korea, Republic of	126
19	Netherlands	51	19	Thailand	70	19	Thailand	86	19	Thailand	125
20	Hong Kong	47	20	Hong Kong	61	20	Hong Kong	76	20	Hong Kong	113

- CAPA believes that the growth in traffic and aircraft movements over the next decade may be even stronger and more sustained than anticipated.
- CAPA Research projects that total passengers numbers at Indian airports will grow from 123 million last year to 420-450 million by 2020.
- CAPA projections based on GDP growth projections of 8-9%.

**Actual and Projected Annual Passenger Numbers at Indian Airports 2000-2020**





- India is set to experience a transformational growth profile.
- The challenges are becoming much greater as the size of the industry increases.
  - 2000-2010: Indian aviation had to cope with an additional 84m pax, at times, this truly stretched the system;
  - 2010-2020: Indian aviation may have to handle an incremental 300-320m pax;
  - In absolute terms the challenge ahead will dwarf recent history.
- Long term planning in line with a clear vision is imperative. We require imagination, strong commitment, a clear and robust regulatory framework and capital.
  - Is Indian aviation ready to meet this challenge?
  - How do we create the appropriate framework for the long term?
  - What kind of regulation do we want – government as regulator or independent regulator ?
  - Independent regulation requires that government does not have stakes in airlines/airports.
  - Is the industry ready for complete deregulation as in the UK/EU?
  - Do we want rapid or gradual change?
  - After reaching agreement on these issues, the roadmap for regulation must be documented.
- CAPA believes that India has a clean-sheet opportunity to create an effective new framework, that supports industry viability and is focused on security, safety, skills and sustainability.

- 1. National Agenda:** A long term, structured national plan (as part of a broader transportation plan) with an appropriate policy framework is necessary to attract capital.
- 2. Regulator:** A modern, unified, professional regulator, with enhanced expertise.
- 3. PSUs:** Air India and the AAI need to be gradually privatised, while corporatisation of air navigation services is essential.
- 4. HR & Training:** World class education & training infrastructure is essential for safe and efficient aviation.
- 5. Safety:** Implementation of safety systems and culture which are comprehensive, enforced and collaborative.
- 6. Liberalisation:** Market access should be liberalised but there must be a level playing field for Indian operators.
- 7. Taxation:** A less punitive fiscal regime – particularly sales tax on fuel – which recognises that airlines must be viable, is imperative.
- 8. Investment:** Private sector capital should be encouraged in airport development.
- 9. Profile:** Enhanced profile and recognition of aviation within government. And state governments must be educated on the role that aviation plays economic competitiveness
- 10. Vision:** Ministry to concentrate on policy and providing strategic leadership.

Characteristic	Status	Indian Airports
Large Home Market	Strong	India has a potentially massive home market growing experiencing double digit rates of growth
Geographic Location	Strong	Well placed at the crossroads between Europe / Middle East / Africa and Asia Pacific – massive catchment within 5 hours
High Quality Airport Infrastructure – Ability to Achieve Short Transfers	Improving	World class facilities with the opening of Delhi T3, targeting 45 min transfer, room for expansion. Mumbai will soon have an excellent integrated terminal but growth is capped.
Attractive Stopover	Good Potential	India has an abundance of tourist attractions – depending on the airport there are significant opportunities to promote as a stopover.
Hub Carrier	Weak	No Indian carrier currently has an extensive route network and financial weakness is barrier to rapid growth
Regulatory Regime	Weak	No clear strategy on bilateral policy and market access
Visa Policy	Weak	Visa requirement, inefficient processing and confusion regarding transit visa requirement is not conducive to hub development
Stakeholder Coordination	Weak	Central government cannot support one hub over another; State governments have limited aviation experience and cannot be seen to promote private entity; airports and airlines have separate owners.
Operating Environment	Weak	Operations in India are subject to airspace and runway congestion, high taxation and uncertain policy framework.

- The limited development of hub operations in India is highlighted by the fact that all 3 Indian international carriers combined offer just 13 non-stop destinations from Delhi (excluding shorthaul services to the Middle East and SAARC)

Region	Non-Stop Destinations by Indian carriers ex Delhi
Americas	Chicago, New York, Toronto
Europe	Brussels, Frankfurt, London, Milan, Paris
Africa	-
Asia	Bangkok, Hong Kong, Shanghai, Singapore, Tokyo
Australasia	-

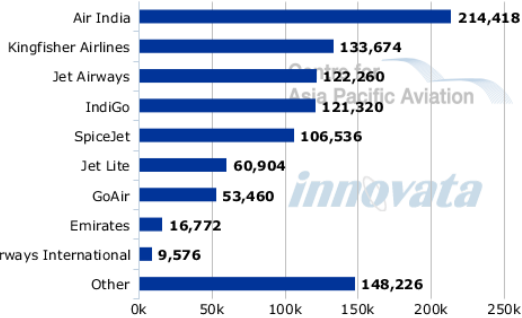
- However, over the last year, as a result of the opening of T3, Air India has increased international seat capacity ex Delhi by 91%.

- As a result of the limited networks of Indian carriers, travel to/from India is funneled over the hubs of foreign carriers, either in Asia, the Middle East or Europe.
- Emirates is the largest foreign carrier operating to India, with 184 weekly services to 10 cities. Mumbai has a 5 times daily service, Delhi 4 times daily.
- The disparity in networks is demonstrated below. Indian carriers offer 13 non-stop destinations from Delhi, Emirates offers 65 from Dubai (in both cases excluding Middle East and SAARC).
- Emirates offers in effect 260 city pairs between India and Europe on a 1 stop basis.

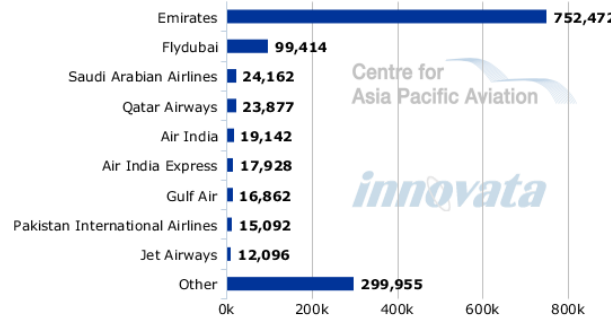
<b>Destinations by Region</b>	<b>Indian Carriers ex DEL</b>	<b>Emirates ex DXB</b>
Americas	3	6
Europe	5	26
Africa	0	17
Asia	5	12
Australasia	0	4

- The absence of a home airline at DEL is highlighted in the charts below which show a much more fragmented profile of airlines using the airport. The other major hub airports have a dominant carrier, which is likely to lead to greater alignment between the airport and airline.

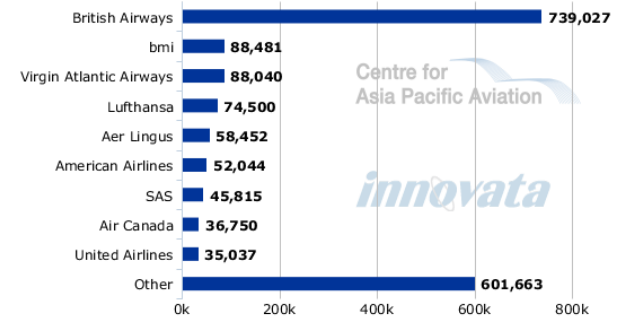
**New Delhi**



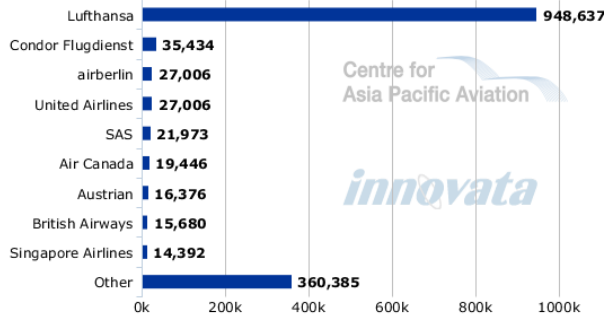
**Dubai**



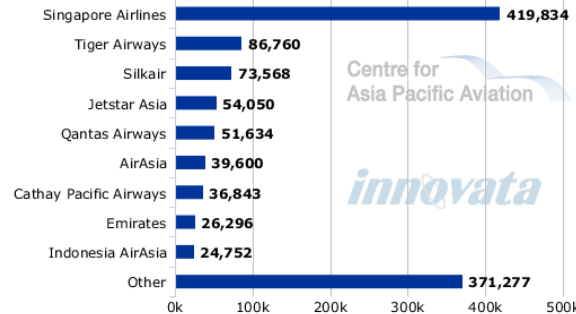
**London Heathrow**



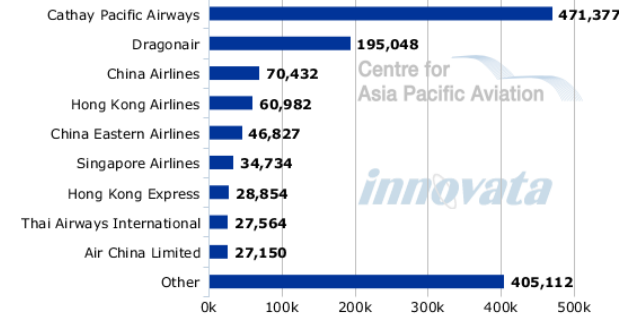
**Frankfurt**



**Singapore**



**Hong Kong**



**Thank You**

**[www.capaindia.com](http://www.capaindia.com)**